Boeing Realty Corporation
4060 Lakewood Blvd., 6th Floor
Long Beach, CA 90808-1700
Telephone: (562) 627-3200
FAX: (562) 627-3109

July 1, 1999
BRC-SMS-268
Transmitted via Facsimile

cc: Dan Sommers
PYI
Sms

Frank Bachman
Montrose Chemical Corporation
600 Ericksen Avenue
NE Tower, Suite 380
Bain Bridge Island, WA 98110

BOEING

Subject: **Proposed Well Sampling and Abandonment Plan (Off-Site Well G-10)**
Montrose Superfund Site, Los Angeles, California

Dear Mr. Bachman:

I have reviewed the subject plan and concur with the proposed activities, with one exception. The plan proposes that the upper 5 feet of conductor casing and PVC casing will be removed. To ensure that the remaining portion of the abandoned well does not interfere with future property development activities, Boeing requests that the upper 6 feet of conductor casing and PVC casing be removed. With this modification to the plan, Boeing accepts the Well Sampling and Abandonment Plan for Well G-10, prepared by Earth Tech, dated June 1999.

If you have any questions or comments, please contact me at (562) 627-3014.

Very truly yours,

BOEING REALTY CORPORATION

S. Mario Stavale
Senior Manager, Real Estate

cc: Mr. Jeffrey Dhont – U.S. Environmental Protection agency, Region IX, San Francisco, CA
Mr. Michael Young – Integrated Environmental Services, Inc., Newport Beach, CA
Mr. Robert Howard – Latham & Watkins, San Diego, CA
Mr. Brian Dean – Earth Tech
Mr. Paul Sunberg - Montrose

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Date: 6-28-99

To: JOHN ORLEANS Fax #: 949-852-8011

Company: INTEGRATED

From: BRIAN DOSS Direct Line #: (562) 951-2212

Location: LONG BEACH, CA
100 W. Broadway, Suite 5000
Long Beach, CA 90802

Sending From Fax #:
(562) 951-2087

Project #:

Subject: NORTHROP WELL G-10

Comments: HERE IS REVISED PLAN.
IT WAS FAXED TO EPA EARLIER TODAY.
COULD YOU PLEASE FORWARD TO KAREN
STEVALL FOR REVIEW.
NORTHROP REQUIRES WRITTEN
ACCEPTANCE OF THE PROPOSED PLAN.
THEY WANT TO MAKE SURE IT'S
CONSISTENT W/ BOEING'S REDEVELOPMENT
PLANS. IN OTHER WORDS, NORTHROP
DOESN'T WANT TO GET A CALL FROM
BOEING IN 3 YEARS CLAIMING THAT
WE DIDN'T BREAKDOWN IT PROPERLY.

BRIAN

If you do not receive _____ pages (including cover page)
please call us as soon as possible at _____

EARTH TECH
A TETRA TECH INTERNATIONAL LTD. COMPANY

100 West Broadway, Suite 5000, Long Beach, California 90802-4443

June 25, 1999

Mr. Jeffrey Dhont
Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

Re: **Proposed Well Sampling and Abandonment Plan (Off-Site Well G-10)**
Montrose Superfund Site, Los Angeles, California

Dear Mr. Dhont:

Per your written request dated June 24, 1999, please find attached a revised sampling and abandonment plan for off-site well G-10. This well is located north of the Montrose Site at property owned by Boeing North American, Inc., and is being abandoned to accommodate property redevelopment activities. If you have any questions or concerns regarding the revised plan, please don't hesitate to contact us at (562) 951-2000. We appreciate your prompt attention to this matter.

Telephone
562.951.2000
Facsimile
562.951.2100

Very Truly Yours,

EARTH TECH

Brian D. Dean
Senior Engineer

Eric J. Peterson
Program Manager

Cc: Mr. Frank Bachman - Montrose Chemical Corp., Bainbridge Island, WA
Mr. Robert Howard - Latham & Watkins, San Diego, CA
Mr. Paul Sundberg - Stockton, CA
Mr. Hooshang Nezafati - CH2MHill, Santa Ana, CA
Mr. Mario Stavali - Boeing Realty Corporation, Long Beach, CA

Proposed Well Sampling and Abandonment Plan
Off-Site Well No. G-10
Montrose Superfund Site, Los Angeles, California

June, 1999

The subject well (G-10) is located on property adjacent to the Montrose Site and owned by Boeing North American, Inc. The property owner has requested that the well be abandoned to accommodate property redevelopment activities. Well G-10, a groundwater monitoring well screened into the Gage Aquifer to the north of the Montrose Site, will be purged and sampled using conventional means. Following sampling, the well will be abandoned in accordance with State and County standards.

Planning and Permitting

Project team personnel will familiarize themselves with the well construction information as provided in Appendix C, *Final Remedial Investigation Report for the Montrose Site*, May 18, 1998. An application for well abandonment will be submitted to the Los Angeles County Department of Health Services. The application will include a site location map, well location map, well construction diagram, and description of the well abandonment methodology. In addition, Dig-Alert and the on-site construction contractor will be notified in advance of the field activity.

Groundwater Well Sampling

Well G-10 will be gauged to measure static groundwater level, purged, and sampled following accepted protocols. The well will be gauged using an electronic interface probe prior to purging and sampling. The depth to water will be measured relative to the top of the well casing. A minimum of three well volumes will be purged from well G-10 prior to sampling. During well purging, the groundwater parameters, temperature, pH, and specific electrical conductivity will be monitored. Well purging will continue until the groundwater parameters stabilize (readings within 10 percent) or until three well volumes are extracted. Well purging will be performed using the existing dedicated submersible pump (if functional). The well purge water will be contained in five steel Department of Transportation (DOT) approved drums and relocated to the Montrose property pending disposal. Following profiling, the drums will be transported under signed manifest for treatment as a non-hazardous waste. Water sampling will be performed once the water level in the well returns to at least 80 percent of its static level. Water samples will be collected using a clean single-use disposal bailer and laboratory-supplied containers. Each sample container will be clearly labeled to identify the well name, date and time of collection, sampler name, analysis, and sample preservative. Samples will be stored in a cooler and delivered to a state-certified laboratory. One duplicate sample will be collected for the purpose of quality control. No trip or equipment rinsate blanks are proposed for this sampling effort. The well samples will be analyzed following EPA Method 8260 for the presence of dissolved volatile organics including benzene, chlorobenzene, chloroform, trichloroethene, tetrachloroethene, and others. The well samples will also be analyzed for the presence of parachlorobenzene sulfonic acid (p-CBSA) following EPA Method 300.0 (ion chromatography). The detection limits for the aforementioned laboratory analyses will not exceed the in-situ groundwater standards established in Table 9-1 of the Record of Decision for the Dual Site Groundwater Operable Unit (dated March 1999). All field activities will be performed in accordance with the existing Health and Safety Plan and Quality Assurance Plan.

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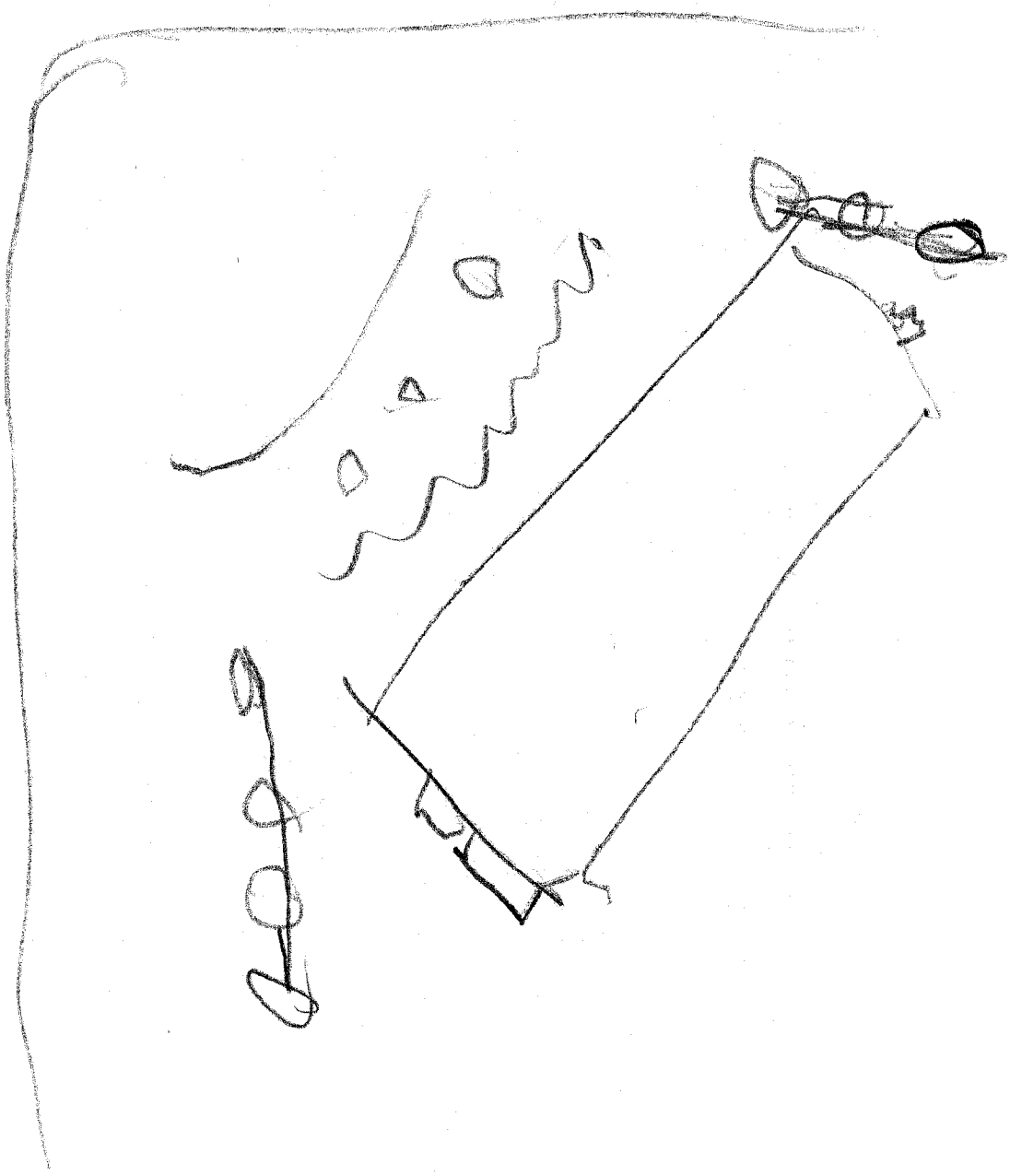
A [illegible] INTERNATIONAL LTD COMPANY



Well Abandonment

Well G-10 will be abandoned in accordance with Bulletins 74-81 and 74-90, Water Well Standards, State of California Department of Water Resources. An exclusion zone will be established for well G-10 using cones and caution tape. The dedicated submersible pump will be lowered to check the total well depth and verify that well G-10 is open and clear for abandonment. Upon removal, the pump assembly will be inspected to verify that no pronounced scaling, corrosion, or other problems are present that could obstruct proper well abandonment. The submersible pump will be stored at the Montrose property. Well construction details will be reviewed to verify all depths and volumes. The soil around the well casing will be excavated to a depth of 5 feet below grade using a backhoe. The well will be permanently sealed in place using a bentonite/cement grout. The grout will consist of 90 percent neat cement and 10 percent bentonite (Hydrogel™). The grout will be properly mixed in batches prior to placement in the well (e.g.: 1 part bentonite per 9 parts neat cement). The premixed grout will be pumped into the well using a tremie pipe initially placed at total depth. The tremie pipe is slowly raised as the well is filled with grout. This methodology will ensure that the grout does not bridge within the well during placement. The grout will be continuously pumped into the well until filled to surface. The volume of grout consumed during this phase of the abandonment should equal or exceed the empty well volume estimated at 130 gallons (4-inch diameter well to 198 feet below surface). The volume of grout delivered into the well casing will be accurately recorded (by monitoring batch volumes) throughout the field activities as a means of verifying proper well abandonment. Due to the weight of the grout column, some grout will initially seep into the adjacent sand pack and/or formation. As this seepage occurs, additional grout will be added to the well until there is no measurable change in the elevation of grout within the well casing. The well casing will then be sealed as additional grout is pumped into the well under pressure. This pressure will force some grout out the well screen and into the sand pack and/or formation. The amount of grout consumed during this phase is dependent on the nature of the sand pack and adjacent formation and can not be accurately estimated. Grout will continue to be pumped into the well until the pressure within the casing begins to increase exponentially. This relatively sudden pressure buildup is indicative that the adjacent sand pack and/or formation have been adequately sealed. Repeated attempts will be made to place grout into the well casing under pressure. If no further grout can be pumped into the well following 3 successive attempts, the pumping equipment will be disconnected from the well allowing the excess grout to spill out into the excavation. The upper 5 feet of conductor casing will be removed using a welding torch, and the upper 5 feet of PVC casing will be removed using a hand saw. Any construction debris generated during these activities will be relocated to the Montrose property pending disposal in a municipal landfill. The grout will be allowed to set for 24 hours at which time the well will be inspected to verify that the level of grout has not fallen. The excavation will be backfilled if required.

Reporting

A letter report will be prepared to summarize the field activities and laboratory results. The report will include a site location map, a well location map, a summary of the purge and analytical data in tabular format, and copies of the laboratory report, waste manifests, and well permit. The report will be reviewed and signed by a State of California registered professional. A draft report will be provided for review and comment.